

1    **WHAT IS CLAIMED IS:**

2            1. A detachable connector for a lamp on a pendent lamp comprising:  
3            a holder being tubular and having a central chamber with an inner open  
4            end and an outer open end;  
5            a socket detachably attached to the inner open end to electrically connect  
6            to a power source;  
7            an attaching device with elements formed on the socket and the holder  
8            that connect to each other to hold the socket on the inner end of the holder;  
9            a plug corresponding to and selectively inserted into the socket to  
10           electrically connect to the socket and electrically connected to the lamp of the  
11           pendent lamp; and  
12           a connecting tube securely attached to the plug and connected to the  
13           lamp of the pendent lamp.

14           2. The detachable connector as claimed in claim 1, wherein the attaching  
15           device comprises:

16           two first ears formed on and extending from the holder, and each first ear  
17           having a threaded hole;

18           a cap formed around the socket and having two second ears formed on  
19           the cap and corresponding respectively to the first ears on the holder, and each  
20           second ear having a through hole defined through the second ear and aligning  
21           with the threaded hole in the corresponding first ear; and

22           two bolts penetrating respectively through the through holes in the  
23           second ears and screwed respectively into the threaded holes in the first ears on  
24           the holder to attach the socket to the holder.

1           3. The detachable connector as claimed in claim 2, wherein the holder  
2 comprises  
3           a tubular body and having an outer surface, an inner surface, a inner  
4 open end, an outer open end, an elongated through hole longitudinally defined in  
5 the outer surface of the body and a tapered surface formed on the inner surface  
6 and corresponding to the elongated through hole;  
7           a bottom cap attached to the inner open end of the body to close the inner  
8 open end;  
9           a sliding tube moveably mounted in the body through the outer open end  
10 and having an outer surface, a central passage, a tapered surface formed on the  
11 outer surface of the sliding tube and corresponding to the tapered surface in the  
12 tubular body and multiple bores defined through the tapered surface of the  
13 sliding tube and communicating with the central passage, and each respective  
14 bore having a depth;  
15           multiple balls moveably mounted respectively in the bores and each ball  
16 having a diameter larger than the depth of the bores;  
17           a spring mounted between the bottom cap and the sliding tube; and  
18           a pushing bar pivotally mounted on the body and having a bottom  
19 penetrating through the elongated through hole and corresponding to the sliding  
20 tube,  
21           wherein the first ears are formed on and extend from the bottom cap.  
22           4. The detachable connector as claimed in claim 1, wherein the attaching  
23 device comprises:  
24           two hooks formed on the holder; and

1           a cap formed around the socket and having two through holes formed on  
2   the cap and respectively corresponding to and hooked by the hooks on the  
3   holder.

4           5. The detachable connector as claimed in claim 4, wherein the holder  
5   comprises

6           a tubular body having an outer surface, an inner surface, a inner open  
7   end, a outer open end, an elongated through hole longitudinally defined in the  
8   outer surface of the body and a tapered surface formed on the inner surface and  
9   corresponding to the elongated through hole;

10          a bottom cap attached to the inner open end of the body to close the inner  
11   open end;

12          a sliding tube moveably received in the body through the outer open end  
13   and having an outer surface, a central passage, an tapered surface formed on the  
14   outer surface of the sliding tube and corresponding to the tapered surface in the  
15   tubular body and multiple bores defined through the tapered surface of the  
16   sliding tube and communicating with the central passage, and each respective  
17   bore having a depth;

18          multiple balls moveably received the bores in respective and each  
19   having a diameter larger than the depth of a corresponding one the bores;

20          a spring mounted between the bottom cap and the sliding tube; and

21          a pushing bar pivotally mounted on the body and having a bottom  
22   penetrating through the elongated through hole and corresponding to the sliding  
23   tube,

24          wherein the hooks are formed on the bottom cap.

1           6. The detachable connector as claimed in claim 4, wherein the socket is  
2 L-shaped.

3           7. The detachable connector as claimed in claim 1, wherein the attaching  
4 device comprises:

5           two hooks integrally formed on the socket; and

6           two loops formed on the holder and respectively corresponding to and  
7 hooked by the hooks on the socket.

8           8. The detachable connector as claimed in claim 7, wherein the holder  
9 comprises

10          a tubular body and having an outer surface, an inner surface, an inner  
11 open end, an outer open end, an elongated through hole longitudinally defined in  
12 the outer surface of the body and a tapered surface formed on the inner surface  
13 and corresponding to the elongated through hole;

14          a bottom cap is attached to the inner open end of the body to close the  
15 inner open end;

16          a sliding tube moveably received in the body through the outer open end  
17 and having an outer surface, a central passage, an tapered surface formed on the  
18 outer surface of the sliding tube and corresponding to the tapered surface in the  
19 tubular body and multiple bores defined through the tapered surface of the  
20 sliding tube and communicating with the central passage, and each respective  
21 bore having a depth;

22          multiple balls moveably received the bores in respective and each  
23 having a diameter larger than the depth of a corresponding one the bores;

24          a spring mounted between the bottom cap and the sliding tube; and

1           a pushing bar pivotally mounted on the body and having a bottom  
2   penetrating through the elongated through hole and corresponding to the sliding  
3   tube,  
4           wherein the loops are formed on the bottom cap.  
5           9. The detachable connector as claimed in claim 7, wherein the socket is  
6   L-shaped.